Volvo FH12 with engine D12A - fault codes

Code	Description	Cause and reaction.	
11	Accelerator pedal sensor.	Accelerator pedal sensor is defective or damaged wiring between the motor control unit and foot pedal. Incomplete pressing the accelerator pedal may have a sharp increase in engine speed.	
12	Idling speed switch pedal.	Accelerator pedal sensor is defective or damaged wiring between the motor control unit and foot pedal. The accelerator pedal is not responding to pressing.	
13	Vehicle speed signal.	Damaged wiring, faulty dash, faulty Tachograph. Cruise control does not work until the fault code is active.	
14	Power relay engine control unit.	The relay is defective or damaged wiring.	
21	Internal malfunction of the engine control unit.	Defective engine control unit. Cruise control does not work.	
22	A programming error in the engine control unit.	Not programmed or programmed with a buggy engine control unit. Engine will not start.	
23	Coolant temperature sensor.	The sensor may be faulty, damaged wiring, water pump works with incomplete effectiveness, crammed with honeycomb radiator or defective thermostat.	
24	Charge air temperature.	The sensor may be faulty, damaged wiring, clogged honeycomb intercooler (an intercooler), mechanical failure of the engine. At temperatures above 91° air discharge with "Check Engine" lamp will light up continuously when the engine power will be reduced. In the event of a fault in the wiring harness or defective sensor "Check Engine" lamp will blink.	
25	Charge air pressure.	The sensor may be faulty, damaged wiring, defective, damaged or clogged the turbocharger intercooler cooler, mechanical failure of the engine.Reduced engine power increased the toxicity of exhaust gases.	
26	Speed sensor camshaft.	Faulty speed sensor camshaft, damaged wiring, broken synchronization between signals from speed sensor camshaft and crankshaft sensor. In case of violation of synchronization will be active codes 26 and 27 at the same time.Engine runs for a long time or may not start for the first time.	
27	Speed sensor the crankshaft.	Faulty speed sensor, crankshaft damaged wiring, broken synchronization between signals from speed sensor camshaft and crankshaft sensor. In case of violation of synchronization will be active codes 26 and 27 at the same time.Engine runs for a long time or may not start for the first time.	
31	Pump-injector cylinder No. 1.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.	
32	Pump-injector cylinder No. 2.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.	

33	Pump-injector cylinder # 3.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.
34	Pump-injector cylinder # 4.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.
35	Pump-injector cylinder # 5.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.
36	Pump-injector cylinder # 6.	Defective pump-injector, damaged wiring between the motor and the control unit pump-injector, mechanical failure in the engine. Engine is not exactly possible increased exhaust gas smokiness.

Informational codes (not fault codes)

Code	Description	Reaction
	Checking the brakes failed or defective brake pedal sensor.	Not working cruise control and "RESUME" function.
	Active signal lamps to warn you that you are braking.	The signal lamps interrupts the cruise control and preventing the installation of a constant speed of rotation of the engine to PTO.
43	Active signal from the brake pedal.	The signal from the sensor interrupts the cruise control and preventing the installation of a constant speed of rotation of the engine to PTO.
44	Idling speed switch active accelerator pedal (accelerator pedal fully depressed).	
45	Contact the clutch pedal is open (the clutch pedal fully or partially depressed).	The signal from the clutch pedal interrupts the cruise control installed on and off manually a constant rotation speed of the engine.
	The signal from the brake is active.	Signal is the condition of possibility to set manually a constant rotation speed of the engine to PTO.
47	Security signal is active.	With active security signal, engine not responding, force the engine goes into idle mode at a speed of 0 km/h or engine off (depends on the security modes, programmed in engine control unit).
51	Cruise control is switched on.	The signal from the cruise control switch is a prerequisite for cruise control and install manually a constant rotation speed of the engine to PTO.
52	Active signal from buttons "ON" and "SET" on the cruise control switch.	When the vehicle cruise control is activated. When the stopped car is activated the option to install manually a constant rotation speed of the engine to PTO.

53	Active signal from buttons "ON" and "RESUME" at the cruise control switch.	During the movement resumes speed, specified previously. When the stopped car motor speed increases or decreases to about 1000 rpm.
61	ABS active signal.	Does not operate the motor brake (VEB).
62	Communication with control unit gearbox Geartronic.	If there is no signal Geartronic is not functioning.
63	VSP active signal (the engine control unit is in the programming mode).	Engine will not start.

1. Switch off the ignition for at least 10 seconds;

- 2. Press and hold the "Check Engine" button;
- 3. Switch on the ignition;
- 4. Keep the "Check Engine" button pressed for approximately 3-4 seconds;
- 5. Release the button.

The registered codes in the memory of the engine control unit will be erased and will not appear until the malfunction occurs.

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